

A New Terrestrial Isopod from Oregon, *Caucasonethes rothi* n. sp.

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Mr. Vincent D. Roth, Technician and Curator, Entomology Department, Oregon State College, captured a specimen of a remarkable terrestrial isopod 8 miles east of Gold Beach, Oregon. Upon the suggestion of Dr. Robert J. Menzies, San Diego, California, Roth sent me this specimen for determination.

This specimen belongs to the genus *Caucasonethes* Verhoeff, and to a new species, named *C. rothi* n. sp. in honor of the discoverer.

The genus *Caucasonethes* belongs to the family Trichoniscidae and to a group of genera which includes *Protrichoniscus* Arc., *Caucasonethes* Verh., *Escualdoniscus* Vand., and *Finloniscus* Brian (and, perhaps, *Brackenridgia* Ulrich, still imperfectly known).

GENERIC CHARACTERS OF CAUCASONETHES VERHOEFF 1932

I consider today that *Amerigoniscus* Vandel 1950 is a synonym of *Caucasonethes* Verhoeff 1932. The generic characters of *Caucasonethes* are the following:

- (1) Pleonites 4 and 5 destitute of glandular pores.
- (2) Peraeopod VII without secondary sexual characters.
- (3) Endopodite of pleopod 1 male unisegmented, likened to a lengthened triangular blade, destitute of terminal bristles.
- (4) Exopodite of pleopod 1 male with posterior end split into two lobes.
- (5) Endopodite of pleopod 2 male biseg-

mented; distal article terminating in an acute and short point.

SPECIES OF THE GENUS CAUCASONETHES

The genus *Caucasonethes* includes three species: *borutzkii* Verhoeff 1932 (caves of Kutais and Zchal-Ziteli, in Transcaucasus; Birstein, 1950: 356); *benrothi* (Vandel, 1950) (*Amerigoniscus*) (Gilly's Cave, Pennington Gap, Virginia); and *rothi* n. sp.

The three species are very near one another but are easily distinguishable thus:

1. Endopodite of pleopod 1 male 8 times longer than broad, rounded at tip
..... *benrothi* (Vandel)
Endopodite of pleopod 1 male 10 times longer than broad, acute at tip 2
2. Exopodite of pleopod 1 male with 2 acute terminal lobes, widely separated from each other *borutzkii* Verhoeff
Exopodite of pleopod 1 male with 2 terminal approximated lobes, one quadrangular, the other triangular . . *rothi* n. sp.

Caucasonethes rothi n. sp.

TYPE LOCALITY: Eight miles east of Gold Beach, Oregon, on the north bank of the Rogue River, under broken rock and moss in a dense forest, April 29, 1951, V. Roth collector. 1 ♂. The type is deposited in the collection of the author.

SIZE: ♂, 5.5 × 2 mm.

COLORATION: White; without pigment.

EYES: absent.

TEGUMENTAL CHARACTERS: Surface of head with 4 rows of granulations, the last one consisting of strong, projecting tubercles. Tergite I with 3, tergites II–VII with 2 rows of granu-

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lations, last one strongest. Granulations of last segments much weaker than those of anterior segments. Some weak granulations upon pleonites 1-3. Every granulation covered with a bristle-scale (*Schuppenborste* of German authors) surrounded with numerous accessory scales (Fig. 1a).

Carapace covered with laciniate scales.

Pleonites 4-5 without glandular pores.

SOMATIC CHARACTERS: Antennary tubercles of cephalon, large triangular, projecting forward.

Tip of telson rounded, with 4 bristles (Fig. 1g).

APPENDAGES: *Antennula* (Fig. 1c)—3-segmented, last article with 10 sensory hairs (*aesthetascs*).

Antenna (Fig. 1d)—long; articles 2, 3, and 4 grooved; articles 4 and 5 with 3 rows of scaly tubercles. Flagellum 6-segmented; articles 2, 3, and 4 with sensory hairs (*aesthetascs*).

Right mandible (Fig. 1f)—2 median penicills and 1 molar penicill.

Left mandible—(?), crushed.

Maxillula—outer endite (Fig. 2b) terminated with 11 teeth and 2 stalks, one long and cylindrical, the other short and feathered.

Maxilliped (Fig. 2a)—palp 4-segmented; only first article individualized. Tip of endite terminated with 3 strong bristles and conical, ciliated spindle.

Peraeopods—normal, long and slender.

Pleopod 3—exopodite quadrangular.

Pleopods 4 and 5—exopodite triangular.

Uropod (Fig. 1e)—endopodite a little shorter and very much narrower than exopodite, terminated with a very long stalk; exopodite with cluster of short stalks.

SECONDARY SEXUAL MALE CHARACTERS:

Peraeopod I—meros and carpos fringed with hyaline scales.

Peraeopod VII—destitute of sexual differences.

Genital duct (*Genitalkegel* of German authors) (Fig. 2e)—very long, narrow, conical at tip.

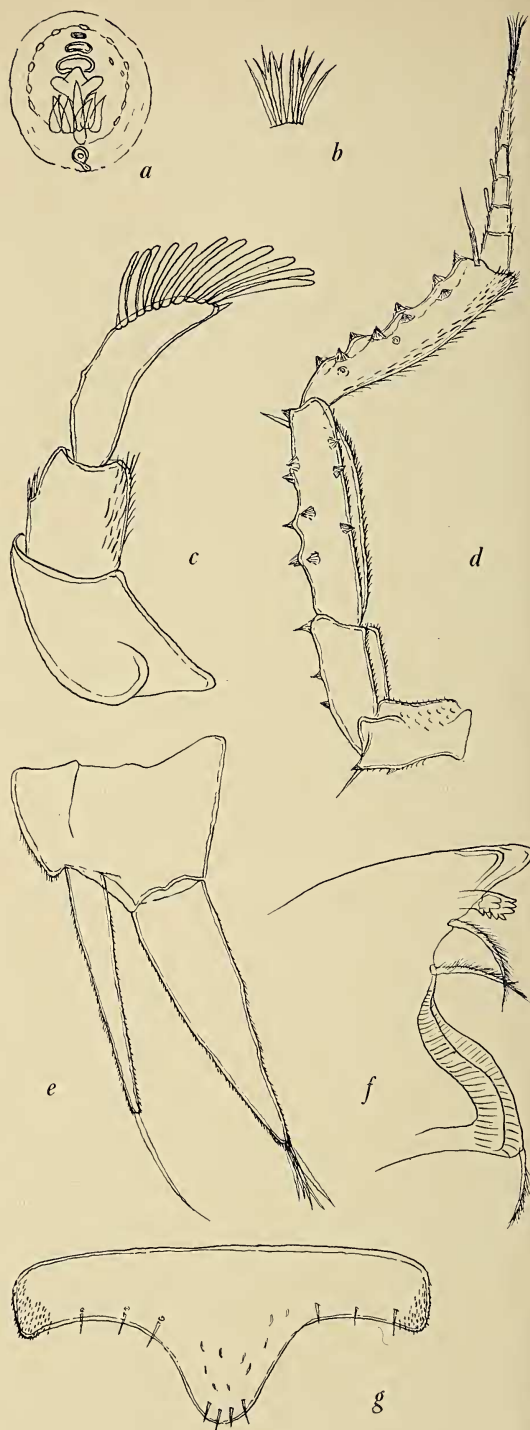


FIG. 1. *Caucasonethes rothi* n. sp.: a, Bristle-scale of tergite I; b, laciniate scale of carapace; c, antennula; d, antenna; e, uropod; f, right mandible; g, telson.



FIG. 2. *Caucasonethes rothi* n. sp.: a, Maxilliped; b, maxillula, end of the outer endite; c, first pleopod of male, en—endopodite, ex—exopodite; d, posterior end of exopodite of first pleopod of male; e, genital duct; f, second pleopod of male.

Pleopod 1 (Figs. 2c, d)—endopodite blade-like, triangular, very narrow and lengthened, destitute of terminal stalk. Exopodite large, quadrangular, terminated with 2 lobes, one quadrangular and ciliated, the other triangular and pointed.

Pleopod 2 (Fig. 2f)—endopodite bisegmented, sharpened at end; exopodite rectangular.

RELATIONSHIP OF CAUCASONETHES ROTHII N. SP. AND OREGONISCUS NEARCTICUS (ARCANGELI)

Arcangeli (1932: 137) gave the name of *Trichoniscus nearcticus* to a single female from MacLeay Park, Portland, Oregon. Hatch (1947: 190) proposed the generic name *Oregoniscus* for this species.

It is difficult to recognize the species of terrestrial isopods based only upon females, but, I think that *Oregoniscus nearcticus* (Arcangeli) and *Caucasonethes rothi* n. sp. are distinct. They differ in many points:

- (1) The size is very different: *O. nearcticus*, 2.73 mm. long; *C. rothi*, 5.5 mm. long.
- (2) The number and disposition of sensory hairs (*aesthetascs*) of antennula is very different in the two species.
- (3) Antennae very long in *C. rothi*, short in *O. nearcticus* "caratteristica è la incavatura che dorsalmente presenta nelle metà distale esterna il 5° articolo dello scapo" (Arcangeli, 1932). This character is missing in *C. rothi*. The flagellum of the antenna is six-segmented in *C. rothi*, four-segmented in *O. nearcticus*.
- (4) The legs of *C. rothi* are long and slender, whereas in *O. nearcticus* "è da notarsi la larghezza e relativamente piccola lunghezza specialmente del meropodite, carpopedite, e propodite, che conferiscono al membro un aspetto massiccio" (loc. cit.).

- (5) In *C. rothi* the endopodite of the uropod is only a little shorter (about one tenth) than the exopodite. In *O. nearcticus*, the endopodite is about one half as long as the exopodite.

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